Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_

Conversions with Scientific Notation HOMEWORK

***Directions***: Tell whether each number is written correctly in scientific notation. If it is incorrectly written, **state the reason**.

1. A fly is about 3 ∙ 10-4 centimeters in length.
2. Jupiter is about 37.88 ∙ 108 kilometers from the sun.
3. ***Directions:*** Write each number in scientific notation.

|  |  |
| --- | --- |
| Standard Form | Scientific Notation |
| 0.058 |  |
| 0.00008 |  |
| 0.00201 |  |

1. ***Directions:*** Write each number in standard form.

|  |  |
| --- | --- |
| Scientific Notation | Standard Form |
| 7.02 ∙ 10-4 |  |
| 4.01 ∙ 10-6 |  |
| 3.007 ∙ 10-1 |  |

***5. Directions:*** Complete the table

|  |  |
| --- | --- |
| Standard Form | Scientific Notation |
| 640 |  |
|  | 1.204 ∙ 10-3 |
| 0.0025 |  |
| 0.000009 |  |
|  | 5.0041 ∙ 102 |
| 9235000 |  |

Summary: Very small numbers can be written in standard form and in scientific notation.

**Standard Form:** 0.0000000000052

**Scientific Notation:** 5.2 × 10-12

**5.2 × 10-12**

**Coefficient**

* greater than or equal to

\_\_\_\_\_

* less than\_\_\_\_\_

**Exponent**

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ exponent

tells how many places to move

the decimal to the \_\_\_\_\_\_\_\_\_\_\_

when changing from scientific

notation to standard form.

**Base**

Always

\_\_\_\_\_